



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/550,493	09/26/2005	Michael Bauer	BAUE3002/JIC	4664
23364 7590 12/30/2009 BACON & THOMAS, PLLC 625 SLATERS LANE FOURTH FLOOR ALEXANDRIA, VA 22314-1176				
EXAMINER				
ANDLER, MICHAEL S				
ART UNIT		PAPER NUMBER		
2876				
MAIL DATE		DELIVERY MODE		
12/30/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

## Application No.

10/550,493

## Applicant(s)

BAUER ET AL.

## Examiner

Michael Andler

## Art Unit

2876

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 08 October 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1,3,4,6-13 and 15-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,4,6-13 and 15-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. The examiner acknowledges and has entered the amendments/arguments filed on 8 September 2009. Claims **1, 3-4, 6-13 and 15-18** are currently pending.

#### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

a) Claims **1, 3, 4, 6-9, 11, 13 and 15-18** are rejected under 35 U.S.C. 103(a) as being unpatentable over Royer (US 7,168,623) in view of Moskowitz et al. (US 5,528,222) and further in view of Chatwin et al. (US 5,492,370).

Regarding claims **1, 4, 6-9, 11 and 17-18**, Royer discloses a self-adhesive security label for a data carrier exemplified by a security document or a document of value, comprising

a substrate (Fig 6, item 14: base) on the front side of which are applied security features (See Fig 11, item 38: *logo or a code* where a code is understood to be a type of security feature) and on the back side of which is provided a cold adhesive foil (See Fig 6, item 20: *double faced adhesive*, Col 1, line 35: "*labels which area easy to lay...by hand*" and Fig 11, item 36: *a packaging strip* comprising *labels 10* where a foil is defined as a layer and a cold adhesive is one typically found on a label that, when used, is pressed into place),

wherein the security label includes an integrated circuit (Fig 6, item 12: *chip*) disposed in a recess of the adhesive foil (Fig 6, item 21: *slot*) adapted to store security data (See Col. 1, lines 22-25: *"large amount of immediately rewritable information can be stored therein"* where it is well known in the art that information related to the *code 38* (security data) would be stored in the *chip 12*);

wherein the recess with the integrated circuit is closed with a self-adhesive covering element (See Fig 6, item 23 and Fig 9, item 22: *resin drop* and Col 3, lines 26-27: *"which can be chosen to be very fluid"* and Col 4, line 23: *"after which slot 21 is filled with drops of resin"* where it is understood that a resin with adhesive properties can be considered a self-adhesive resin); and

an antenna (Fig 6, item 16: *antenna*) disposed between the substrate and the adhesive foil (See Fig 5 and Col 4, lines 10-12: *"A series of antennas...formed on a...indexed strip intended to be cut into a series of bases"* and lines 20-21: *"double-faced adhesive 20...is...glued on the indexed strip"* and Col 2, lines 56-58: *"Antenna 16 may be formed on the base"*)

said antenna connected with the integrated circuit (See Fig 6, item 26: *welding beads* where it is well known in the art that welding beads would be melted by ultrasonic radiation to form an electrical connection without damaging the *chip 12*) so as to provide a contactless communication with the integrated circuit (See Col 1, lines 23-25: *"a large amount of immediately rewritable information can be stored therein, without having to handle the object"* thus providing contactless communication to the chip through the antenna, since there would have to be contact between the integrated

circuit and the antenna in order for there to be an electrical connection, which therefore could not be "contactless")

Royer also suggests that the invention relates "to self-adhesive labels" but also that "the present invention may also apply to any self-adhesive electronic circuit" (Col 4, lines 57-59) and that "the surface of the base which is not glued to the double-faced adhesive may be painted or printed or covered with an easily paintable or printable material" (Col 4, lines 54-57). Royer further suggests that "base 14 is made of a flexible material of low thickness, for example a piece of a polyester sheet." (Col. 2, lines 59-61). Royer also suggests that "the surface of the base which does not receive the double-faced adhesive is provided to receive the printing of a pattern, of a text or of a code" (Col 1, lines 61-64) and shows a *logo 38* printed on a *label 10* in Figure 11.

Royer does not specifically teach a data carrier carrying a security label wherein the front-side security features contain a printed area produced by a sheet fed intaglio printing method and wherein the front-side security features are selected from the group consisting of a passport photograph, a finely structured pattern, machine readable features, fluorescent substances, magnetic or electrically conductive substances, and a polydimensional bar code and wherein the front-side security features at least partially are covered with a covering layer, wherein the covering layer has a thickness of less than 20 micron, and wherein the covering layer contains holographic diffraction structures and wherein the substrate comprises cotton paper or paper with a mixture of cotton/synthetic fiber.

Moskowitz et al. discloses a data carrier carrying a security label (See Fig 11: *CD*, Fig 8: *envelope*, Fig 9: *passport*, Fig 10: *admission ticket*, Fig 12: *credit card*, and Fig 13: *drivers license* and Fig 8, item 810: *thin RF tag*).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention, to use a self-adhesive label containing an integrated circuit on a data carrier, in order to tag documents with "a thin flexible radio frequency tag apparatus" (See Abstract) that stores information related to the document or its owner that is verifiable by a trusted agent (See, for example, Col 6, line 63 thru Col 7, line 5).

Moskowitz et al. also suggests where the "top surface...can be printed with the appropriate graphics while the bottom surface has a pressure sensitive adhesive" (Col 6, lines 47-49).

Royer as modified by Moskowitz et al. does not specifically teach wherein the front-side security features contain a printed area produced by a sheet fed intaglio printing method and wherein the front-side security features are selected from the group consisting of a passport photograph, a finely structured pattern, machine readable features, fluorescent substances, magnetic or electrically conductive substances, and a polydimensional bar code and wherein the front-side security features at least partially are covered with a covering layer, wherein the covering layer has a thickness of less than 20 micron, and wherein the covering layer contains holographic diffraction structures and wherein the substrate comprises cotton paper or paper with a mixture of cotton/synthetic fiber.

Chatwin et al. discloses wherein the front-side security features contain a printed area produced by a sheet fed intaglio printing method and wherein the front-side security features are selected from the group consisting of a passport photograph, a finely structured pattern, machine readable features, fluorescent substances, magnetic or electrically conductive substances, and a polydimensional bar code and wherein the front-side security features at least partially are covered with a covering layer, wherein the covering layer has a thickness of less than 20 micron, and wherein the covering layer contains holographic diffraction structures (See, for example, Fig 6, item 42 and Col 12, lines 43-51) and wherein the substrate comprises cotton paper or paper with a mixture of cotton/synthetic fiber (Col 6, lines 18-27).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to modify the invention of Royer by using the invention of Chatwin et al. in order to provide a label for documents of value that not only contains information stored in a memory chip related to the document or its owner that is verifiable by a trusted agent but also contains security features printed with intaglio print and a covering layer in order to "impart a useful degree of tactility to the finished article, which is a further security enhancement for some applications" (See Chatwin et al., Col 9, lines 1-3) and which further makes the documents more tamper resistant (See Chatwin et al., Abstract) in uses which would require a higher form of security.

Regarding claims **3 and 13**, Royer discloses wherein the antenna is printed on, bonded to or embossed into the substrate (Col 2, lines 56-58: "*Antenna 16 may be*

*formed on the base in a known manner by metal deposition followed by an etching*" where metal deposition is a known method of bonding metals to substrates).

Regarding claim **15**, Royer as modified by Moskowitz et al. and Chatwin et al. as applied above, disclose all the limitations of claim **11**.

Royer also suggests that the invention relates "to self-adhesive labels" but also that "the present invention may also apply to any self-adhesive electronic circuit" (Col 4, lines 57-59) and that "the surface of the base which is not glued to the double-faced adhesive may be painted or printed or covered with an easily paintable or printable material" (Col 4, lines 54-57). Royer also discloses assembling the *antenna 16* and *chip 12* to the *base 14* in a continuous reel-fed manner (See Fig 10).

Royer does not specifically teach wherein step b) is carried out by providing a reel-fed substrate with a background print by offset printing method.

Chatwin et al. discloses wherein the printing is carried out by providing a reel-fed substrate (See Col 6, lines 2-7) with a background print by offset printing method (Col 4, lines 43-46).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention, to print patterns, text or codes on a label using offset printing as one of the common types of electronically controlled imaging means available to a manufacturer as taught by Chatwin et al. (See Col 4, lines 43-46).

Regarding claim **16**, Royer discloses wherein the steps c) and d) are effected in a reel-fed manner (See Fig 10, item 28: *indexed strip* and item 20: *cut-up double-faced adhesive* and Col 4, lines 10-11: "a series of antennas...has been formed on a



mechanically indexed strip 28 intended for being cut into a series of bases" where the antenna and adhesive are clearly assembled in a reel-fed manner).

b) Claim **10** is rejected as being unpatentable over Royer (US 7,168,623) as modified by Moskowitz et al. (US 5,528,222) and Chatwin et al. (US 5,492,370) as applied to claim **9** above, and further in view of Rancien (US 2004/0157054).

Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

Regarding claim **10**, Royer as modified by Moskowitz et al. and Chatwin et al., disclose all the limitations of claim **9**.

Royer suggests that the invention relates "to self-adhesive labels" but also that "the present invention may also apply to any self-adhesive electronic circuit" (Col 4, lines 57-59) and that "the surface of the base which is not glued to the double-faced adhesive may be painted or printed or covered with an easily paintable or printable material" (Col 4, lines 54-57).

Rancien suggests that "the present invention relates to...a sticky security document such as a visa for sticking to a passport" (Section 0001, lines 2-3).

Royer as modified by Moskowitz et al. and Chatwin et al. do not specifically teach wherein the adhesive strengths of the cold adhesive foil and of the bond between the integrated circuit and the antenna are adjusted relative to each other such that a

removal of the security label from the data carrier results in damaging the antenna or separating the antenna from the integrated circuit.

Rancien discloses wherein the adhesive strengths of the cold adhesive foil and of the bond between the integrated circuit and the antenna are adjusted relative to each other such that a removal of the security label from the data carrier results in damaging the antenna or separating the antenna from the integrated circuit (See section 0017, lines 1-2 and section 0018: "In different zones, the adhesive layer may present different adhesive properties with regard to the antenna...thus, when attempting to unstuck the document, the antenna may remain secured to the covering layer in the first zone and remain secured to the backing in the second zone").

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to adjust the adhesive layer of a security label in order to damage the antenna when removing the label, in order to "improve the security of sticky documents provided with radiofrequency identification devices" (Sec. 0005, lines 2-3).

c) Claim **12** is rejected as being unpatentable over Royer (US 7,168,623) as modified by Moskowitz et al. (US 5,528,222) and Chatwin et al. (US 5,492,370) as applied to claim **11** above, and further in view of Isen et al (US 5,763,058).

Regarding claim **12**, Royer as modified by Moskowitz et al. and Chatwin et al., disclose all the limitations of claim **11**.

Royer suggests that "antenna **16** may be formed on the base in a known manner by metal deposition followed by an etching" (Col 2, lines 56-58).

Royer does not specifically teach applying the antenna arrangement by screen printing conductive inks.

Isen et al. discloses applying the antenna arrangement by screen printing conductive inks (See Fig 10 and Col 3, lines 3-4: *"an electrical circuit component formed of a conductive liquid printed directly onto one side of the flexible substrate"*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to apply an antenna to a substrate of a security label using conductive liquids, in order to provide a label capable of performing it's function, "as printed, without the need for post-printing processes such as metal etching...and/or electroless deposition" (Col 2, lines 65-67).

### ***Response to Arguments***

3. Regarding claims **1 and 11** and their respective dependent claims, applicant has amended claims **1 and 11** to clarify that the recess is closed by "a self adhesive covering element" and has argued that the previously cited prior art references do not teach this limitation. Applicant's arguments with respect to claims **1 and 11** and their respective dependent claims have been fully considered but they are not persuasive.

Regarding claims **1 and 11**, the examiner respectfully disagrees with the applicant and would point out that the analogous resin of Royer that is used to close the slot of the RFID label (Fig 9, items 21-22) is capable of "attaching" a chip to the base substrate (See Col 1, line 53). The examiner would further point out that a resin drop with adhesive properties for attaching itself and other objects to a substrate can be referred to as "a self-adhesive resin". The examiner would further point out that this

assertion is supported in the prior art by at least Greenberg (US 4,124,864) that refers to a "self-adhesive resin" shown in Figure 2 (item 44) used to secure parts of a semiconductor package (See Col 3, lines 27-46). The applicant is invited to consider adding either additional structural limitations to clarify the structural nature of the covering element or possibly adding functional limitations that better describe the functional features of the covering element that are indirectly referred to in claim 10. The examiner respectfully suggests that the applicant give consideration to the covering elements disclosed by Brady et al. (US 6,100,804) in Figure 10D, item 1018 and Reiner (US 2002/0056855) in Figure 1, item 5.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Andler whose telephone number is (571) 270-5385. The examiner can normally be reached on Monday-Friday 7:30 AM to 3:30 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael Andler/  
Examiner, Art Unit 2876

/Michael G Lee/  
Supervisory Patent Examiner, Art Unit 2876